In the Claims

Claim 1 (currently amended). A method of ~~concentrating,~~ detecting~~, and extracting~~ particles from a whole blood sample, the method comprising:

exposing the blood sample to an enzyme-detergent combination comprising plasminogen, ~~and~~ streptokinase, phospholipase A_2 and DNase, wherein said plasminogen and streptokinase is maintained in a frozen state ~~in coincident relation~~ until exposure of the blood sample to the enzyme-detergent combination and

wherein said streptokinase reacts with plasminogen upon thawing whereby plasmin is formed; and

analyzing the exposed blood sample for the presence of particles, wherein the particles are selected from the group consisting of prions, toxins, metabolic markers, cancerous matter, disease state markers, bacteria, virus, and fungi.

Claim 2-3 (canceled).

Claim 4 (previously presented). The method of claim 1 wherein the plasminogen is suspended in an aqueous salt solution prior to freezing.

Claim 5 (original). The method of claim 4 wherein the aqueous salt solution comprises NaCl.

Claim 6 (previously presented). The method of claim 4 wherein the aqueous salt solution comprises Na_3PO_4.

Claim 7 (canceled)

Claim 8 (previously presented). The method of claim 1 wherein the particles are DNA molecules and further comprising the step of replicating the particles through PCR.

Claim 9 (canceled)

Claim 10 (previously presented). The method of claim 1 further comprising the step of exposing the whole blood sample to an endonuclease.

Claim 11 (canceled)

Claim 12 (original). The method of claim 11 wherein the plasminogen and streptokinase are mixed and distributed in disposable test containers.

Claim 13 (currently amended). The method of ~~claim 11~~ claim 1 wherein the ~~plasminogenis combined with~~ enzyme-detergent combination further comprises one or more enzymes selected from the group consisting of ~~Phospholipase A_2, DNase,~~ Endonuclease[[,]] and Lipase.

Claim 14 (previously presented). The method of claim 13 wherein the enzyme-detergent combination is suspended then dried in pellets of trehalose storage buffer and packaged as a dry reagent.

Claim 15 (canceled)

Claim 16 (currently amended). The method of ~~claim 11~~ claim 1 further comprising:

resuspending the ~~plasminogen and streptokinase~~ enzyme-detergent combination in a buffer solution;

adding the buffer solution containing ~~plasminogen and streptokinase~~ the enzyme-detergent combination to the whole blood sample; and

incubating the whole blood sample at room temperature.

Claim 17 (currently amended). The method of claim 16, wherein the enzymes of the enzyme-detergent combination ~~are in a dried state and~~ comprise any combination of 1,500-4,500 KU ~~Phospholipase~~ phospholipase A_2, 5,000-10,000 U Streptokinase, 2-10 U Plasminogen, 200-3,650 U DNase, 200-4,000 U Endonuclease, and 10,000-100,000 U Lipase.

Claim 18 (previously presented). The method of claim 16 further comprising:
centrifuging the incubated whole blood sample to form a supernatant and a pellet;
decanting the supernatant from the centrifuged whole blood sample; and
washing the pellet.

Claim 19 (previously presented). The method of claim 18 wherein the whole blood sample is centrifuged for approximately 20 minutes at 5,000-5,500 x g at a temperature of 10-20°C.

Claim 20 (previously presented). The method of claim 18 wherein the pellet is washed with an Ecotine-HEPES solution, or a Sucrose-HEPES solution, or an Ecotine-HEPES solution and a Sucrose-HEPES solution.

Claim 21-22 (canceled).

Claim 23 (previously presented). The method of claim 16 further comprising:
centrifuging the incubated whole blood sample to form a supernatant and a pellet;
decanting the supernatant from the centrifuged whole blood sample;
digesting the pellet; and
applying the digested pellet to a nucleic acid extraction method.

Claim 24 (previously presented). The method of claim 23 wherein digesting the pellet further comprises lysis and DNase inactivation.

Claim 25 (previously presented). The method of claim 23 wherein digesting the pellet further comprises lysis and Endonuclease inactivation.

Claim 26 (previously presented). The method of claim 23 wherein digesting the pellet further comprises utilizing proteinase K, sodium dodecyl sulfate, aurintricarboxylic acid, and sodium citrate buffer, incubated at room temperature.

Claim 27-32 (canceled).

Claim 33 (previously presented). The method of claim 16 wherein the buffer solution comprises Potassium Phosphate, Magnesium Chloride, Sodium Chloride, and Aurintricarboxylic Acid.

Claim 34 (previously presented). The method of claim 33 wherein the buffer solution further comprises octylphenol ethoxylate.

Claim 35 (previously presented). The method of claim 33 wherein the enzyme-detergent combination comprises a trehalose storage buffer.

Claim 36 (previously presented). The method of claim 35 wherein methyl 6-O-(N-heptylcarbamoyl)-α-D-glucopyranoside and Saponin are provided in the trehalose storage buffer.

Claim 37 (previously presented). The method of claim 36 wherein the concentration of methyl 6-O-(N-heptylcarbamoyl)-α-D-glucopyranoside in the trehalose storage buffer is 20-35mM.

Claim 38 (previously presented). The method of claim 36 wherein the concentration of Saponin in the trehalose storage buffer is 0.05-0.1%.

Claim 39 (previously presented). The method of claim 35 wherein the trehalose storage buffer comprises Potassium Phosphate, octylphenol ethoxylate, Dithiothreitol, and Trehalose.

Claim 40 (original). The method of claim 39 wherein the trehalose storage buffer comprises 10 mM Potassium Phosphate.

Claim 41 (previously presented). The method of claim 39 wherein the trehalose storage buffer comprises 0.01-0.04% octylphenol ethoxylate.

Claim 42 (original). The method of claim 39 wherein the trehalose storage buffer comprises 1-5 mM Dithiothreitol.

Claim 43 (original). The method of claim 39 wherein the trehalose storage buffer comprises 0.3-0.5 M Trehalose.

Claim 44 (previously presented). The method of claim 1 wherein prior to exposing the whole blood sample to said enzyme-detergent combination the blood is contacted with an anticoagulant.

Claim 45 (previously presented). The method of claim 1 wherein the whole blood exposed to said enzyme-detergent combination is unclotted whole blood.

Claim 46 (previously presented). The method of claim 1 wherein the whole blood sample is at least 6.0 ml.

Claim 47 (canceled)

Claim 48 (currently amended). The method of ~~claim 47~~ claim 1 further comprising exposing the whole blood sample to methyl 6-O-(N-heptylcarbamoyl)-α-D-glucopyranoside and Saponin.

Claim 49 (currently amended). The method of claim 1 further comprising exposing the whole blood sample to ~~a DNase~~ and aurintricarboxylic acid.

Claim 50 (previously presented). The method of claim 33 wherein the method is conducted at pH 7.8 to 8.0.

Claims 51-63 (canceled)

Claim 64 (currently amended). The method according to ~~claim 11~~ claim 1, wherein the enzyme-detergent combination further comprises an enzyme that can break down a nuclear membrane.

Claim 65 (previously presented). The method according to claim 1, wherein the method is conducted at pH 7.8 to 8.0.